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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/902,250	07/10/2001	Gerald T. Mearini	0937.0016	9551

7590 03/28/2006

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EXAMINER

FULLER, ERIC B

ART UNIT	PAPER NUMBER
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1762

DATE MAILED: 03/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/902,250	Applicant(s) MEARINI ET AL.	
	Examiner Eric B. Fuller	Art Unit 1762	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 20 and 23-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1 is/are allowed.
- 6) ☒ Claim(s) 2-4, 6, 20 and 23-28 is/are rejected.
- 7) ☒ Claim(s) 5 and 7-10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 1, 2005 has been entered.

Response to Arguments

Applicant's amendments and arguments have been found convincing and the rejections of the previous Office Action have been withdrawn. However, because anything can be considered "movable", claim 2 simply reads to aim the evaporation energy source towards the target. Almost all processes of this type embody this feature, as evaporating the target would be difficult otherwise. The rejection below reads on the applicant's claims for this reason. Applicant's arguments are moot in view of the new grounds of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 2, 3, 6, 23, and 24-28 rejected under 35 U.S.C. 102(b) as being anticipated by Yializis et al. (US 4,842,893).

Yializis teaches providing multiple substrates (column 9, lines 1-25; figure 4, ref. 166 and 168), a fixed ion source (column 7, lines 15-40), a movable target (column 4, lines 45-66) that is positioned at source deposition location (figure 2, ref. 124), and material is deposited on the substrates. The shutters are taught (column 8, lines 55-60; figure 1, ref. 52). Multiple targets that are moved into the source deposition location are taught (figure 1) and the substrates are rotated (figure 4).

Claims 4 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yializis et al. (US 4,842,893), as applied to claim 3 above, and further in view of Kelley et al. (US 4,101,925).

Yializis teaches the limitations of claim 3, as shown above, but is silent to the speed of rotation. However, Kelley teaches that the speed at which the substrate is rotated is significant in achieving thin uniform layers (column 3, lines 58-65). Speeds within the applicant's claims are taught. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to rotate the substrates of Yializis by the speeds taught by Kelley. By doing so, one would reap the benefits of achieving uniform films.

Allowable Subject Matter

Claim 1 is allowed.

Claims 5 and 7-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The prior art fails to teach, or make obvious, the limitation of ceasing deposition of the layer prior to achieving target thickness, by shuttering the substrates, then independently unshuttering the substrates to resume deposition in order to achieve target thickness, in combination with the limitations from which they depend.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric B. Fuller whose telephone number is (571) 272-1420. The examiner can normally be reached on Mondays through Thursdays.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim Meeks, can be reached on (571) 272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



EBF



TIMOTHY MEEKS
PATENT EXAMINER